

**REMARKS****I. Introduction**

In response to the Advisory Action dated June 16, 2004, Applicants have amended claims 1 and 9 so as to further clarify the claimed subject matter. Applicants have canceled claims 10-12, without prejudice or disclaimer. New Claim 13 is also presented herein with a Request for Continued Examination. Support for these amendments can be found, for example, at page 25, lines 4-30. No new matter has been added. Examination and allowance of this application are respectfully solicited.

For the reasons set forth below, Applicants respectfully submit that all pending claims are patentable over the cited prior art references.

**II. The Rejection Of The Claims Under 35 U.S.C. § 102**

Claims 1, 2, 4-6, 8 and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over USP No. 6,010,769 to Sasaoka. Applicants respectfully traverse this rejection for at least the following reasons.

Claims 1 and 9, as amended, recite in-part a circuit substrate comprising a region containing an uncured resin component provided at a bonding site between the wiring layers and the insulating base adjacent the conductor.

In accordance with one embodiment of the present invention, a region 6f with residual resin solution containing an uncured liquid resin component is formed between the wiring layer 1c and the insulating base 1a at the place of contact between the wiring layer 1c and the insulating base 1a by using a conductive paste 1d'. When the region 6f with residual resin solution is formed, the connecting strength between the wiring layer 1c and the insulating base 1a is weakened compared to the bonding strength between the wiring layer

1c and the conductive paste 1d' (see, e.g., page 25, lines 4-30 of the specification). As a result, the connecting strength at the bonding site between the wiring layer and the conductor is enhanced, thereby providing a high connection reliability even under temperature condition.

In contrast to the present invention, Sasaoka discloses a method for manufacturing a multilayer wiring board comprising a step of arranging an insulating layer made of an uncured resin intervened between the first conductor layer and the second conductor layer so as to face the first conductive pillar with the second conductive pillar, and a step of curing the insulating layer (see, col. 9, lines 26-43). More specifically, Sasaoka discloses that the second insulating layer 11b and the second wiring layer 13 are arranged in a manner that the second wiring layer 13 is facing the first wiring layer 12 via the second insulating layer 11b (see, Fig. 6C), and the whole construction is pressurized from the outside of the second wiring layer 13 by being held with a press plate and heated at the same time. By heating and pressurizing, the second insulating layer 11b is cured into C stage. At this time, the substantially conical shape conductive pillar 14 pierces the second insulating layer 11b in a semi-cured state, and connects to the facing second via land 13a. Since the second insulating layer 11b begins to cure after the core substrate and the second wiring layer 13 come in contact with both sides of the second insulating layer 11b, the conductive pillar 14 formed on the first wiring layer 12 pierces the second insulating layer 11b relatively easily. (see, col. 21, lines 48-63).

However, nowhere does Sasoka disclose or suggest a region containing an uncured resin component provided at the interface between the wiring layers and the insulating layer adjacent the alleged conductor, as recited by claims 1 and 9. Indeed, Sasaoka

merely discloses a method for piercing the conductive pillar 14 into the second insulating layer 11b after curing.

Thus, as each and every limitation must be either disclosed or suggested by the cited prior art in order to establish a *prima facie* case of obviousness (see, **M.P.E.P. § 2143.03**), and Sasaoka fails to do so, it is respectfully submitted that claims 1 and 9 are patentable over the prior art.

### **III. All Dependent Claims Are Allowable Because The Independent Claims From Which They Depend Are Allowable**

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claims 1 and 9 are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also in condition for allowance.

For all of the foregoing reasons, it is submitted that claims 2-8 are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejections of claims 11-9 under 35 U.S.C. § 103 be withdrawn.

Further, new claim 13 recites that the region containing the uncured resin component has a conductor and an uncured resin included in the conductor. As discussed above, it does not appear that Sasaoka discloses any uncured resin component between the wiring layers and the insulating base adjacent the alleged conductor, let alone suggest suggest that the region containing the foregoing uncured resin component has a conductor

and an uncured resin included in the conductor. As such, it is respectfully submitted that claim 13 is patentably distinct over the cited prior art.

**IV. Conclusion**

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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